

UNITED STATES DEPARTMENT OF ENERGY

HELIUM-3 (He-3) SALES SOLICITATION

INDEX

SECTION A - GENERAL PRE-SALE INFORMATION

A.1 List of Abbreviations

A.2 Definitions

SECTION B – He-3 SALES INVITATION FOR BIDS PROVISIONS

B.1 Requirements for a Valid Bid

B.2 Penalty for False Statements in Bids to Buy Helium-3

B.3 Certification of Independent Price Determination

B.4 Purchaser Eligibility

B.5 Submission of Bids and Modification of Previously
Submitted Bids

B.6 Late Bids and Withdrawal of Bids

B.7 Currency for Bids

B.8 Language of Bids and Contracts

B.9 Proprietary Data

B.10 Mistake in Bid

B.11 Overall Evaluation of Bids

B.12 Other Evaluation Factors Considered for Award

B.13 Selection and Award

B.14 Requests for Additional Information

B.15 Bidder's Certification of Acceptance Period

B.16 Notification of Award

B.17 Mandatory Document Submission

B.18 Purchase of He-3

B.19 Delivery of Purchased He-3

ATTACHMENTS

A. CA-10-90 rev 3

B. He-3 Specifications

SECTION A - GENERAL PRE-SALE INFORMATION

The U.S. Department of Energy (Department) has been participating in an Interagency Group to manage the federal supply of helium-3 (He-3). The Interagency Group assesses and prioritizes requests for He-3 necessary for the federal mission, while simultaneously taking steps to decrease demand and increase supply. The success of the Interagency Group has mitigated short- to mid-term impacts of a He-3 shortage. In recognition of the important activities requiring He-3 that are outside of the federal mission, the Department has identified 4,000 liters of purified He-3 gas for competitive sale. Stakeholders whose Fiscal Year (FY) 2013 He-3 needs will be met by the federal allocation process, or who submitted requests for He-3 gas through a U.S. federal agency in anticipation of participating in the FY 2013 federal allocation process, should not participate in this auction. The Department wishes to sell the He-3 to multiple Bidders who submit the highest bids in a competitive bid process. Initially, each Bidder will be limited to 400 liters, but may bid on unlimited lots of 100 liters each. Should there be any He-3 remaining after the 400 liter limit has been reached by all Bidders, then remaining gas will go to the highest Bidder.

He-3 is stored and will be delivered in cylinders with a Compressed Gas Association (CGA) 580 brass valve. Unless otherwise specified by the Bidder each cylinder will contain a nominal 100 liters of purified He-3, standard temperature and pressure (STP). Cylinders are designed to U.S. Department of Transportation specification, 3AA 2015, and are refillable cylinders. Please refer to Section B.11 for more details on packaging options.

The Department will accept questions regarding the Invitation for Bids. All questions must be submitted to He3auction@science.doe.gov no later than **5 PM (Eastern Standard Time) October 23, 2012**. DOE will respond to all questions by **5 PM (Eastern Standard Time) October 26, 2012**. DOE will post all questions received and their corresponding answers on the website <http://www.isotopes.gov/he-3auction>. The identity of the stakeholder posing the question will be kept anonymous and will not be posted on the website.

The He-3 Sales Invitation for Bids Provisions (HSP) set forth below will apply to the sale of He-3.

A.1 List of Abbreviations

- (a) DOE: U.S. Department of Energy
- (b) HSP: He-3 Sales Invitation for Bids Provisions

A.2 Definitions

- (a) *Bid*. The term "bid" means a response to an Invitation for Bids and, if accepted, would bind the Bidder to perform the resultant contract. A bid is a single price/quantity combination for a specific line item. A Bidder may submit multiple bids.
- (b) *Business Day*. The term "business day" means any day except Saturday, Sunday or a U.S. Government holiday.
- (c) *DOE Evaluation Committee*. The term "DOE Evaluation Committee" means the persons with the authority to make determinations and findings, and decisions regarding the He-3 bids including award to the highest ranking bidder on behalf of the Government.
- (d) *Government*. The term "Government", unless otherwise indicated in the text, means the United States Government.
- (e) *Bidder*. The term "Bidder" means any person or entity that submits a proposal to enter into a contract with DOE to purchase He-3.

SECTION B – He-3 SALES INVITATION FOR BIDS PROVISIONS (HSP)

This HSP sets forth terms and conditions of sale, including Bidder financial and performance responsibility measures, or descriptions thereof, which are applicable to price competitive sales of this He-3.

1. He-3 is for sale only to stakeholders that do not currently participate in the existing federal allocation process of He-3.
2. Bids shall not be accepted from U.S. Federal Government agencies.
3. Foreign institutions may bid on He-3 gas.
4. Bids shall be submitted in the form of a completed U.S. Department of Energy Isotope and Technical Services Order Form CA-10-90, rev 3. An example is provided as Attachment A.
5. All bids shall be in terms of U.S. dollars per liter.
6. The minimum bid which will be considered is \$2,500 per liter. This does not include the cost of the cylinder, packaging and shipping.
7. The minimum quantity which will be sold will be a lot of 100 liters of purified He-3 gas at STP (see attached product specifications in Appendix B). Bids will not be accepted for less than 100 liters.
8. Bidders may bid for one lot of 100 liters or multiple lots.
9. Deliveries will be made to the Buyers, in accordance with their instructions for commercial transportation.
10. Bidders may propose their own delivery schedules and must pay for deliveries 30 days before desired shipment. Delivery schedules may not extend beyond June 1, 2013.
11. Buyers may choose between two different cylinders to package the gas. The cylinders will become the property of the Buyer. A Size 6 cylinder can package from 100 STP liters to 180 STP liters and the Size 30 cylinder can package from 200 STP liters up to 800 STP liters. Both cylinders are equipped with a CGA 580 cylinder valve. The cost of the size 6 cylinder is \$325.00 and the cost of the size 30 cylinder is \$375.00.
12. Invoices for approved bids and final sales will include the additional cost of the cylinders plus packaging and handling. Transportation charges will be collected and invoiced by the commercial carrier. Terms of payment are payment in advance by electronic transfer of funds. The Isotope Business Office, National Isotope Development Center, will issue an invoice to the Buyer. The Buyer shall wire funds to:
 - a. TREASURY - NEW YORK CITY ABA 021030004
 - b. Please include "TREAS NYC/(890000001)" on the Receiver Info-Line
 - c. List all invoice numbers being paid on the Sender Info-Line.
13. The Buyer must comply with the United States export laws and the regulations relative to any export or re-export of the He-3. The Buyer must also agree that the He-3 will not be shipped, transferred or re-exported into any country prohibited by the United States export laws and regulations, or will be used for any purpose prohibited by such laws.
14. Bidders must unconditionally accept all terms and conditions in the Invitation for Bids.

B.1 Requirements for a Valid Bid

1. All valid bids to purchase He-3 gas must be received by the U.S. Department of Energy no later than **5 PM**, local prevailing time (Washington, DC) on **November 6, 2012**.
2. The U.S. Department of Energy requires bids from qualified Bidders be submitted in **electronic format** to **He3auction@science.doe.gov**. A confirmation of receipt will be sent electronically within 24 hours the next business working day. **Do not send bids via U.S. Postal Service mail.**
3. Electronic bids shall constitute a legal, binding bid.
4. Bidders must bid on each lot of 100 liters individually.
5. By submission of a bid, the Bidder certifies that:

- a. It is customarily engaged in activities utilizing helium.
- b. The He-3 will be used in devices such as dilution refrigerators, cryostats, detection systems, laser spectrometers, etc., or for the manufacture and sale of such devices.
- c. Agrees without exception to all provisions of Section B and the U.S. Department of Energy Isotope Technical Services Order Form CA-90-10, rev 3 (Attachment A). The Government will not award a contract to a bidder who has failed to so agree.

Bidders will be notified of any amendments to this Invitation for Bids. Amendments that explicitly require acknowledgment must be so acknowledged by e-mail no later than the end time set for receipt of bids.

B.2 Penalty for False Statements in Bids to Buy Helium-3

1. Making false statements in a bid to buy He-3 may expose a Bidder to a penalty under the False Statements Act, 18 U.S.C. Section 1001, which provides:

Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined under this title or imprisoned not more than 5 years, or both.

2. Under 18 U.S.C. 3571, the maximum fine to which an individual or organization may be sentenced for violations of 18 U.S.C. (including Section 1001) is set at \$250,000 and \$500,000 respectively, unless there is a greater amount specified in the statute setting out the offense, or the violation is subject to special factors set out in Section 3571. The United States Sentencing Guidelines also apply to violations of Section 1001, and offenders may be subject to a range of fines under the guidelines up to and including the maximum amounts permitted by law.

B.3 Certification of Independent Price Determination

1. The Bidder certifies that:
 - a. The price in this bid has been determined independently, without, for the purposes of restricting competition, any consultation, communication, or agreement with any other Bidder or competitor relating to: (i) those prices; (ii) the intention to submit a bid; or (iii) the methods or factors used to calculate the prices bid.
 - b. The price in this bid has not been and will not be knowingly disclosed by the Bidder, directly or indirectly, to any other Bidder or to any competitor before the time set for receipt of bids, unless otherwise required by law; and
 - c. No attempt has been made or will be made by the Bidder to induce any other concern to submit or not to submit a bid for the purpose of restricting competition.
2. Each submission of a bid is considered to be certification that the Bidder:
 - a. Is the person within the Bidder's organization responsible for determining the price being bid, and that the Bidder has not participated, and will not participate, in any action contrary to (1)(a) through (1)(c) of this provision above; or

- b. Its intended use and potential end-users and end-use locations and that the He-3 is not for resale except as part of a device requiring He-3 such as detection systems, dilution refrigerators, laser spectrometers, etc.
 - c. Has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (1)(a) through (1)(c) of this provision; (ii) as their agent does hereby so certify; and (iii) as their agent has not participated, and will not participate, in any action contrary to (1)(a) through (1)(c) of this provision.
- 3. A bid will not be considered for award when (1)(a), (1)(c), or (2) of this provision have been deleted or modified. If the Bidder deletes or modifies (1)(b) of this provision, the Bidder must furnish with the bid a signed statement setting forth in detail the circumstances of the disclosure.

B.4 Purchaser Eligibility

DOE will only sell He-3 to Bidders customarily engaged in activities utilizing helium. By submission of a bid, the Bidder certifies that it meets this requirement.

B.5 Submission of Bids and Modification of Previously Submitted Bids

Bids must be submitted as specified in provisions B.1 and B.6 of this document.

Modification of a previously submitted bid may be accomplished by submission of new price that will supersede the price previously submitted in its entirety. The Government will only consider for evaluation the Bidder's last price received prior to the receipt deadline.

B.6 Late Bids and Withdrawal of Bids

Bids not received by the time and date set for receipt of bids will not be considered for evaluation. The date/time stamp affixed by the Government upon receipt will be the sole determinant of timely receipt.

A Bidder may withdraw a bid by changing the bid quantity to zero prior to the end time set for receipt of bids.

B.7 Currency for Bids

Bid prices will be stated and paid in U.S. dollars.

B.8 Language of Bids and Contracts

All bids in response to the Invitation for Bids and all modifications of bids will be in English. All correspondence between Bidders or purchasers and DOE will be in English.

B.9 Proprietary Data

Bid quantities and prices are not considered proprietary information. If any other information submitted in connection with a sale is considered proprietary, that information should be so marked, and an explanation provided as to the reason such data should be considered proprietary. Any final decision as to whether the

material so marked is proprietary will be made by DOE. Freedom of Information Act regulations governing the release of proprietary data will apply.

B.10 Mistake in Bid

After the deadline for receipt of bids, the DOE Evaluation Committee will examine all bids for mistakes. In cases where the DOE Evaluation Committee has reason to believe a mistake may have been made, the committee will request from the Bidder a verification of the bid, calling attention to the suspected mistake. The DOE Evaluation Committee or a representative may telephone the Bidder and confirm the request by e-mail. The DOE Evaluation Committee may set a limit of as little as 30 minutes for telephone or e-mail response. If no response is received, the DOE Evaluation Committee may determine that no error exists and proceed with bid evaluation.

The DOE Evaluation Committee will make administrative determinations described below if a Bidder alleges a mistake after submission of bids and before award.

- a. The DOE Evaluation Committee may refuse to permit the Bidder to withdraw a bid, but permit correction of the bid if clear and convincing evidence establishes both the existence of a mistake and the bid actually intended. However, if such correction would result in displacing one or more acceptable bids which are higher than the corrected bid, the DOE Evaluation Committee will not so determine unless the existence of the mistake and the bid actually intended are ascertainable substantially from the Invitation for Bids and bid itself.
- b. The DOE Evaluation Committee may determine that a Bidder will be permitted to withdraw a bid in whole or in part if only part of the bid is affected, when the bidder requests permission to do so and clear and convincing evidence establishes the existence of a mistake, but not the bid actually intended.

In all cases in which the Bidder is allowed to make verbal corrections to the original bid, confirmation of these corrections must be received in writing within the time set by the DOE Evaluation Committee or the original bid will stand as submitted.

B.11 Overall Evaluation of Bids

DOE will evaluate the bids for responsiveness and completeness. Non-Responsive bids shall be rejected. Bidders, who submit incomplete bids, will be notified by DOE and requested to submit the missing information within three calendar days. DOE reserves the right to reject any or all bids and to waive minor informalities or irregularities in bids received.

The DOE Evaluation Committee will reject bids when:

- a. A Bidder is on the Federal Government's list of debarred, ineligible and suspended bidders; or
- b. Evidence, with respect to a Bidder, comes to the attention of the DOE Evaluation Committee, of conduct or activity that represents a violation of law or regulation (including an Executive Order); or
- c. Evidence is brought to the attention of the DOE Evaluation Committee of past activity or conduct of a Bidder that shows a lack of integrity (including actions inimical to the welfare of the United States) or unwillingness to perform, so as to substantially diminish the DOE Bid Evaluation Committee's confidence in the Bidder's performance under the proposed contract; or
- d. A Bidder is eligible to obtain He-3 through the current federal He-3 allocation process.
- e. The Bidder has not submitted the mandatory documentation described in Section B.17.

B.12 Other Evaluation Factors Considered for Award

Should the number of bids exceed available gas and be similar in price, the DOE reserves the right to make an assessment on the merit of the proposed use of the gas, in order to make a final decision on award.

B.13 Selection and Award

1. The DOE Evaluation Committee will evaluate and rank each of the bids based on the degree of responsiveness, completeness and financial bid; merit will also be considered if necessary.
2. Each Bidder is initially limited to a total of four lots or 400 liters, but may bid on unlimited lots.
3. Awards of each line item (100 liter lots) will be made to the Bidders who submit the highest priced bids responsive to the applicable laws and this Invitation for Bids, until the initial 400 liter limit is reached.
4. Should remaining He-3 remain after the 400 liter limits have been reached by all Bidders, then remaining gas will go to the highest Bidder. In the event that there is a draw, the remaining liters will be divided among those customers with the same bid.
5. The DOE Evaluation Committee may reduce the line item quantity available and / or reject a bid if it is determined to be the best interest of the Government.

B.14 Requests for Additional Information

DOE reserves the right to require the submission of additional information from the Bidder, including financial statements, plans for use of He-3 and any other relevant information relevant to the performance of the contract. The DOE Evaluation Committee will set a deadline for receipt of this information, if needed.

B.15 Bidder's Certification of Acceptance Period

1. By submission of a bid, the Bidder certifies that its bid will remain valid for 30 business days after the date set for the receipt of bids.
2. By mutual agreement of DOE and the Bidder, the Bidder's acceptance period may be extended for a longer period.

B.16 Notification of Award

DOE will notify the awardee(s) via e-mail followed by an official award letter on Department letterhead.

B.17 Mandatory Document Submission

Pursuant to 41CFR 109-1.5303(b)(6) and 109-45.301-51 regarding sales contracts for DOE high-risk property (which includes Dual Use List commodities), Bidders shall submit with their bids a letter, which contains the following information.

1. The nature of its business and business location.
2. Its intended use and potential end-users and end-use locations and that the He-3 is not for resale except as part of a device requiring He-3 such as detection systems, dilution refrigerators, laser spectrometers, etc.
3. The benefit of its intended use to the United States.
4. Its intentions to export He-3.

5. Acknowledgement that He-3 is export controlled, it will comply with all U.S. export regulations, obtain a U.S. Department of Commerce (DOC) export license, if necessary, and it will pass DOE export control guidance to subsequent buyers.
6. Acknowledgement that Tritium and He-3 separation technology is controlled and may require a DOC export license before the technology is transferred to a foreign national or a U.S. representative of a foreign entity. No separations technology can be transferred to a foreign national from a designated DOE Sensitive Country without first obtaining a DOC export license.
7. The letter must be signed by a company officer and a digital copy of the letter be submitted to He3auction@science.doe.gov. A confirmation of receipt will be sent electronically within 24 hours the next business working day. Mandatory documentation must be received by the U.S. Department of Energy no later than **5 PM.**, local prevailing time (Washington, DC) on **November 6, 2012**.

B.18 Purchase of He-3

1. If needed, DOE will update the Isotope and Technical Service Order Form(s) CA-10-90, rev. 3, received from the bidders to the correct quantity and price, sign them and fax copies to the successful buyer(s). The Bidder(s) will sign the CA-10-90, rev. 3 form and return it to the United States Department of Energy, Oak Ridge Isotope Business Office within 7 calendar days of the date on the CA-10-90 form.
2. The United States Department of Energy, Oak Ridge Isotope Business Office in the National Isotope Development Center will invoice the Buyer(s) within 7 calendar days after receipt of the signed CA-10-90, rev. 3 form.
3. Buyers will electronically transfer the payment funds to the account listed in Section B, He-3 Sales Invitation for Bids Provisions, paragraph 12 within 14 calendar days, or the He-3 may be awarded to the next higher Bidder.
4. The United States Department of Energy's Oak Ridge Isotope Business Office will authorize shipment of the He-3 gas from Oak Ridge National Laboratory.

B.19 Delivery of Purchased He-3

1. The Buyer will be responsible for packaging and shipping costs.
2. Deliveries will be made to the purchasers, in accordance with their instructions for commercial transportation.
3. Bidders may propose their own delivery schedules and must pay for deliveries 30 days before desired shipment. Delivery schedules may not extend beyond June 1, 2013.
4. If the amount of awarded gas is in multiples of 400 liters, a Bidder may propose to have the gas packaged in a single cylinder containing 400 liters. Final sales will also include the cost of the cylinders. The cylinders will become the property of the Buyer.
5. Each Buyer should provide the United States Department of Energy's Oak Ridge Isotope Business Office with their preferred carrier for shipment of He-3 and their account number for the freight charges.

Attachment A
U.S Department of Energy
Isotope and Technical Services
Order Form CA 10-90, rev 3.

Attachment B
Helium-3 Specifications
Chemical Purity $\geq 99.9995\%$ (total impurities as specified below < 5 p.p.m.)
Isotopic Enrichment $\geq 99.9\%$

| Description | Specifications (mole/mole) |
|-------------------------------|------------------------------------|
| Helium-3, atomic fraction (%) | $\geq 99.9\%$ |
| Oxygen (ppm) | ≤ 1 |
| Nitrogen (ppm) | ≤ 1 |
| Carbon Monoxide (ppm) | ≤ 1 |
| Carbon Dioxide (ppm) | ≤ 0.5 |
| Argon (ppm) | ≤ 0.5 |
| Water (ppm) | ≤ 0.1 |
| Activity (uCi/cc) | $\leq 1.3 \times 10^{-7}$ |